NEW JERSEY DEPARTMENT of HEALTH and SENIOR SERVICES

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EMS for Children Newsletter

EMS for Children Program
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CHILDHOOD DIABETES: THE GROWING EPIDEMIC

Nancy L. Rhodes, RN, MA, CDE
Co- Chair, Clinical Services Task Force, NJ Diabetes Advisory Council
And President, Garden State Association of Diabetes Educators

Once thought to be a disease among older adults, type 2 diabetes is enveloping children at a staggering rate. For the last decade, a sharp rise in the incidence of type 2 diabetes among the pediatric population is evident among healthcare providers, dispelling the traditional belief of an adult onset disease. There is a startling prediction that one in three children born in the year 2000 may develop diabetes in their lifetime. As with all cases of type 2 diabetes, the common denominator is insulin resistance. The body simply does not respond appropriately to the action of its insulin, resulting in abnormal glucose levels in the blood. According to the American Diabetes Association (ADA), 85% of children with type 2 diabetes are obese, presenting with glycosuria (the presence in the urine of abnormal amounts of sugar) without ketonuria (the presence of ketone bodies in the urine), modest polyuria (excessive urination) and polydipsia (chronic excessive thurst), and little to no weight loss[1]. Diabetic ketoacidosis (DKA) is present in 5-25% of new cases, often precipitated by illness, infection and certain medications, such as corticosteroids for the treatment of asthma, though it may occur without any of these associated factors. Despite the fact that DKA presents in approximately 40% of children with newly diagnosed type 1, insulin dependent diabetes, with highest rates among teenagers, 20% of cases of DKA among children may be associated with obesity and type 2 diabetes. Mortality rates of DKA may be as high as 19%, with 40% of all DKA-related deaths occurring in those less than age 24.

A genetic predisposition for type 2 diabetes in children is historically present. Of these children, 45-85% has at least one parent with type 2 diabetes, and 74-100% has a family history of relatives with diabetes over several generations. Many cases of new onset type 2 diabetes occur among teenagers presenting with acanthosis nigricans, a dark pigmentation at the nape of the neck, and irregular or absent menses among the female population, associated with polycystic ovarian syndrome as a result of insulin resistance. Puberty, with heightened growth hormone secretion, is a traditional age where insulin resistance occurs naturally. With associated obesity, resistance is exacerbated, markedly increasing the risk for the development of type 2 diabetes among young people. Childhood obesity is at epidemic proportions, mostly associated with environmental and socio-economic factors. More and more children live sedentary lives. For safety reasons, many latchkey children of working parents no longer have the freedom to play outdoors without

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2006 EMSC Advisory Council

Meeting Dates:

February 21, 2006
May 16, 2006
August 15, 2006
November 21, 2006

Meeting Location:

N.J. Hospital Association
760 Alexander Road
Princeton, NJ

Meeting Time:

10:00 a.m.—12:00 p.m.

EMSC Emergency Medical Services for Children

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CHILDHOOD DIABETES: THE GROWING EPIDEMIC

fear. They are often confined indoors, until parents arrive home. The children make decisions leading to unhealthy snacks or excessive quantities of food, and spend idle hours watching television or playing computer games. Avid childhood readers and scholars, though intellectually stimulated, may not actively participate in challenging physical activities, further contributing to obesity and the risk of type 2 diabetes. Even in safe school environments, the institution of vending machines, though profitable for the schools, has placed children at even greater risk for obesity, as most of the choices are unhealthy drinks and snacks. Parents must work with school officials to change attitudes and health beliefs, by raising awareness of better choices for their children. Schools can simply replace sugary sodas with more healthy drinks, or opt out for fruit and yogurt instead of cookies and chips. Family involvement is key to reducing childhood obesity and diabetes. Families should be encouraged to plan regularly scheduled, healthy and enjoyable mealtimes and snacks, control portions, promote joint physical activities at least twice weekly, and help children develop healthy attitudes toward good eating habits and exercise. Childhood obesity should be a universal concern, as it sets the stage for type 2 diabetes with a myriad of future consequences.

[1] American Diabetes Association. Type 2 diabetes in children and adolescents. Diabetes Care 2000;23:381-89

7th Annual Caring for New Jersey's Children Conference

Planning has begun for the 2006 conference. We are very excited about next year, as we will be joining the Caring for New Jersey's Children Conference with the New Jersey Statewide Conference on EMS. As additional information on the 2006 event becomes available, it will be posted to www.state.nj.us/health/ems, as well as published in the Spring 2005 EMSC Newsletter. This educational event is tentatively scheduled for early November 2006, in Central New Jersey, and we hope to see you and a friend there!

The New Jersey Emergency Medical Services for Children Program would like to thank those who attended the 2005 Annual Caring for New Jersey's Children Conference this past May. Attendees made it evident how satisfied they were with the presenters and the topics, as we received many positive reviews. We sincerely appreciate you making the time to join us. To the presenters, a heartfelt "Thank You" for your dedication and commitment to the children of New Jersey!

To report child abuse or neglect in New Jersey:
call 1-877-NJ ABUSE
(1-877-652-2873)
24 hours/day, 7 days/week
Make the Call;Save a Child

Numbers to Remember

New Jersey Poison Information and Education System
1-800-222-1222

EMSC Going Electronic

In an effort to distribute the EMSC newsletters and other corespondence in a more efficient manner, EMSC is continuing its effort toward electronic distribution. Please send email to emsc@doh.state.nj.us and include your name, address, provider level and email address you would like to receive the newletter. You may also fax this information to 609-633-7954.

Thanks to all those that have provided us with this information.

Beyond 911: Responding To an Infant/Child Emergency

Linda Esposito, Ph.D., MPH, RN

The SIDS Resource Center was established in response to the SIDS Assistance Act of 1987 and with an annual grant, beginning in 1988, from the New Jersey Department of Health and Senior Services. It is a program of the University of Medicine and Dentistry of New Jersey-Robert Wood Johnson Medical School (UMDNJ-RWJMS). In 1997, the SIDS program merged with the Carly Hollander SIDS Center of Hackensack University Medical Center (HUMC) to form the SIDS Center of New Jersey (SCNJ). The program's co-medical directors are Thomas Hegyi, M.D., professor and vice-chair of pediatrics, at the UMDNJ-RWJMS and Harold Perl, M.D., attending neonatologist at HUMC and clinical assistant professor in the department of pediatrics, at the UMDNJ-New Jersey Medical School. Barbara Ostfeld, Ph.D., a developmental psychologist and professor in the department of pediatrics at the UMDNJ-RWJMS, and Robert Hinnen, MSW, a social worker with HUMC, serve as the co-program directors.

The programs activities include family bereavement support, community and provider education to reduce the risk of SIDS and the management and analysis of the database that yields the epidemiological profile. The program works with parent groups, the child care community, hospitals, health care systems, first responders, schools, community groups, state, national and federal organizations and other Department of Health and Senior Services programs to reduce infant mortality and racial and ethnic disparities associated with SIDS. In addition, the SCNJ works closely with the medical examiner's office by receiving referrals to counsel families who have experienced an infant or child loss.

SIDS is unexpected, usually occurring in healthy-appearing infants under 1 year of age. A SIDS death occurs quickly and usually during sleep. SIDS is rare during the first month of life. Although SIDS can occur in older infants, most SIDS deaths occur by the end of the sixth month, with the greatest number occurring in infants between 2 and 4 months of age (AAP, 2000). By definition, a SIDS diagnosis requires a complete autopsy, a thorough death scene investigation, and a clinical history. A death is diagnosed as SIDS only after all probable alternatives have been eliminated—in other words, SIDS is a diagnosis of "exclusion." Often, the cause of an infant death can be determined only through a process of collecting information; conducting sometimes complex forensic tests; and by talking with parents, other caregivers, and physicians.

Dealing with a sudden infant death presents both professional and personal challenges for the first responder. While working to hopefully revive the infant, the EMT may also be faced with consoling the parent or other caregiver, as well as assessing and recording information about the death scene. As an emergency medical technician (EMT), you are often the first person on the scene following the discovery of a lifeless infant. Responding to these calls is especially difficult and emotionally wrenching—even for the most experienced and well-trained EMT.

The Sudden Infant Death Syndrome Center in New Jersey (SCNJ) is available to provide first responder training which covers topics such as SIDS, grief, responses of caregivers and professionals, new death scene investigation protocols for the EMS and methods to reduce stress and anxiety in the first responder. In addition, this free two-hour presentation is approved for 2 CEUs.

To obtain more information about SIDS, the Sudden Infant Death Syndrome Center of New Jersey and the new EMS pediatric death scene interview tool, please call Linda Esposito, Ph.D., MPH, RN, Education, Research and Communications Coordinator at 800-545-7437.

References

Sudden, Unexpected Infant Death:

Information for the Emergency Medical Technician. U.S. Department of Health and Human Services, Health Resources and Services Administration. http://www.sidscenter.org/

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EMSC Materials Available

The following EMSC Program materials can be requested free of charge. Fax or E-Mail your name, address, facility name, and email address to:

State of New Jersey
Department of Health & Senior Services
Office of Emergency Medical Services
Fax 609-633-7954
E-Mail emsc@doh.state.nj.us

☐ **Pediatric Assessment Ambulance Poster** Self–Stick: 8½" x11"

☐ **Emergency Care in the School Poster** 11" x 17" for school nurses

☐ **Basic Emergency Lifesaving Skills (BELS)–** A booklet outlining the framework for teaching emergency lifesaving skills to children and adolescents–US Department of Health & Human Services–Maternal & Child Health Bureau

☐ **Resource Manual for the Nurse in the School Setting-** Includes Emergency Care Protocols, recommended care supplies and multiple assessment resourses. (Reproduced with the permission of Illinois EMSC program.)

EMSC Staff Changes

The NJ EMS for children program is happy to announce that Mr. Eric Hicken, MICP has joined the EMSC staff. Eric has many years of experience as a volunteer BLS provider, a Paramedic and a Paramedic Supervisor. Eric will be directly responsible for both the EMSC Newsletter and our annual "Caring for New Jersey's Children" conference, so feel free to contact Eric with your suggestions (emsc@doh.state.nj.us or 609-633-7777). The NJ EMS Program is dedicated to improving the health and safety of our children through the provision of pediatric continuing education, technical assistance and reference and resource materials.

In Case of Emergency (ICE)

The In Case of Emergency or ICE concept was the brainchild of Cambridge, England Paramedic Bob Brotchie, who works for the East Anglian Ambulance NHS Trust. He discovered that most accident victims carry no next of kin details, yet most carry a mobile phone. ICE was launched in early 2005 in conjunction with the phone companies and newspapers. There is no simpler way of letting the emergency services know who to contact should you be involved in an accident and be unable to speak for yourself than by using ICE.

ICE will allow EMS crews and police officers to quickly contact the identified person who can be informed of the incident, and potentially supply vital health information.

1. Type the acronym ICE followed by a contact name (for example, ICE - mom or ICE - David) into the address book of your mobile phone
2. Save their phone number
3. Tell your ICE contact that you have recorded their contact number.

Be sure to go to their website for further information
- WWW.ICECONTACT.COM -